

Online Interpersonal Victimization: Predictors of Victimization Over Time

Josephine Korchmaros, PhD, Kimberly J. Mitchell, PhD, & Michele Ybarra, MPH PhD

Center for Innovative Public Health Research



* Thank you for your interest in this presentation. Please note that analyses included herein are preliminary. More recent, finalized analyses may be available by contacting CiPHR or further information.

Background

Internet-based (i.e., online) sexual solicitation, harassment, and bullying are reported to affect about 15% and 36% of youth, respectively, and are related to psychosocial challenge (e.g., poor caregiver-child relationships, depressive symptomatology, and delinquency).

The current research addresses gaps in the literature by exploring:

- 1) Persistence of online sexual solicitation and harassment victimization over time.
- 2) Online and offline factors that predict continued non-victimization, re-victimization, desisting from victimization, and new victimization.

Methodology

Growing up with Media (GuWM) survey—a national 3-wave longitudinal online survey conducted annually of 1,587 youth.

A stratified random sample obtained from the Harris Poll Online (HPOL) opt-in panel of millions of respondents.

English-speaking youth 10-15 years of age at Wave 1 who used the Internet at least once in the last 6 months.

Data Preparation

Data weighted

1) To represent the population of U.S. parents of children who at Wave 1 were ages 10-15, had access to the Internet, and had accessed the Internet in the past 6 months. Weighted on age, gender, race/ethnicity, region, education, household income, and age/gender of child who took the survey.

2) To account for differences between those who are online versus those who are not, those who join online panels versus those who did not, and those who responded to this particular survey invitation versus those who did not.

3) To adjust for respondents' propensity to participate in the study after Wave 1.

Imputation

Missing data and "refused" responses imputed using multiple imputation for participants who had valid data for at least 85% of the survey questions asked of all youth.

Research Questions

Can we accurately identify adolescents who are at risk for online victimization during a 2 year period?

Is the identification differentially accurate depending on when the predictive factors are measured (i.e., prior to the 2 year period, in the middle of the 2 year period, or at the end of the 2 year period)?

What are the online and offline factors that predict online victimization over a 2 year period?

Variables of Interest

Outcome:

Online victimization status (unwanted sexual solicitation online and online harassment) over a 2 year period. Survey respondents asked annually about victimization during the past 12 months.

Victimization status:

- Not victimized during Year 1 or Year 2
- Re-victimized = victimized during Year 1 and Year 2
- Desisted = victimized during Year 1 but not Year 2
- Newly victimized = victimized during Year 2 but not Year 1

Predictors at 3 time points:

Age, ethnicity, biological sex, academic achievement, alcohol use, marijuana use, Internet use, delinquency, offline relational bullying, offline physical bullying, online aggressive behavior, offline victimization, parental Internet safety characteristics, general parental monitoring characteristics, emotional closeness with parent, and parental discipline.

Year 0 predictors (measured prior to 2 year period)

Year 1 predictors (measured in middle of the 2 year period)

Year 2 predictors (measured at the end of 2 year period)

Covariates:

Self-reported honesty of survey responses and whether or not respondents were alone when completing survey.

Sample Characteristics

N= 1,007 youth who completed GuWM survey at all 3 Waves.

Biological sex: 50% female
Race: 73% White, 13% Black, 9% mixed, 5% other
Ethnicity: 16% Hispanic
Mean age: 12.6 years

Household income:

Income	Percent
<\$25,000	15
\$25,000-\$49,999	25
\$50,000-\$74,999	26
\$75,000-\$99,999	15
≥\$100,000	19

Internet use:

Days go online in a typical week	Percent
0 days	4
1-2 days	23
3-4 days	21
5-6 days	16
7 days	35

Time spent online in a typical day	Percent
0 minutes	6
1-30 minutes	23
31 minutes-1hour	26
>1 hour –2 hours	24
>2 hours-3 hours	11
>3 hours	11

Results

2 Year Victimization Status:	44% not victimized	29% re-victimized	10% desisted	17% newly victimized
-------------------------------------	--------------------	-------------------	--------------	----------------------

Stepwise Discriminant Function Analysis

1st Function Loadings of & % of Variance Accounted for by Year 0, Year 1, and Year 2 Predictors in Predicting 2 Year Online Victimization Status

Predictor	Year 0 Predictors	Year 1 Predictors	Year 2 Predictors	
Online aggressive behavior	.72	.78	.82	Regardless of when the predictors were measured the 1st function accounted for about 94% of the variance.
Internet use	.57	.43	.34	
Offline relational bullying	.49	.44	.46	
Emotional closeness with parent	.43	.28	.32	Online aggressive behavior was the strongest predictor of victimization status regardless of when the predictors were measured.
Age	.42	.30	.30	
Offline victimization	.32	.41	.39	
Biological sex	.25	.17	.19	Amount of internet use and offline relational bullying were the 2nd and 3rd strongest predictors when measured prior to or in the middle of the 2 year period.
Academic achievement	.08	.04	.09	
Alone when completing survey	-.24	-.08	-.12	
Honest when completing survey	-.10	.00	-.05	At the end of the 2 year period, offline relational bullying and offline victimization were the 2nd and 3rd strongest predictors.
Percent of variance accounted for	93.5	94.0	93.7	
Canonical correlation	.50	.63	.61	

2 Year Online Victimization Status Group Classification Using Year 0, Year 1, and Year 2 Predictors

Actual 2 Year Online Victimization Status	Predicted 2 Year Online Victimization Status				
	Using Year 0 Predictors (56% of cases correctly classified)				
	Not victimized	Re-victimized	Desisted victimized	Newly victimized	Total (%)
Not victimized	87.0%	12.7%	0.2%	0.0%	100.0%
Re-victimized	38.9%	60.8%	0.0%	0.3%	100.0%
Desisted victimized	71.8%	28.2%	0.0%	0.0%	100.0%
Newly victimized	73.4%	25.9%	0.0%	0.7%	100.0%
	Using Year 1 Predictors (61% of cases correctly classified)				
	Not victimized	Re-victimized	Desisted victimized	Newly victimized	Total (%)
Not victimized	88.9%	5.7%	0.0%	5.4%	100.0%
Re-victimized	30.4%	64.5%	0.0%	5.1%	100.0%
Desisted victimized	58.8%	35.2%	0.0%	6.0%	100.0%
Newly victimized	72.7%	13.2%	0.0%	14.1%	100.0%
	Using Year 2 Predictors (60% of cases correctly classified)				
	Not victimized	Re-victimized	Desisted victimized	Newly victimized	Total (%)
Not victimized	92.8%	7.1%	0.0%	0.1%	100.0%
Re-victimized	36.1%	63.6%	0.0%	0.3%	100.0%
Desisted victimized	86.2%	13.2%	0.2%	0.3%	100.0%
Newly victimized	60.7%	36.8%	0.0%	2.6%	100.0%

Red: correctly classified
Green: false negatives for victimization = those predicted to NOT be victimized but who are victimized
Blue: false positives for victimization = those predicted to be victimized but who are NOT victimized

Summary & Conclusion

Although 44% of adolescents were not victimized over the 2 year period, over half (56%) were victimized at some point during the 2 year period and 29% were victimized during both of the years.

As commonly found, aggressive behavior (both offline and online); offline victimization; Internet use; parental bond; and age are particularly predictive of online victimization.

Ethnicity, alcohol use, marijuana use, delinquency, offline physical bullying, parental Internet safety characteristics, general parental monitoring characteristics, and parental discipline were not included in the final set of predictors; they did not significantly increase the accuracy with which the model predicted 2 year online victimization status.

Overall, predictors measured prior to the 2 year period were as accurate at predicting victimization status as predictors measured in the middle of the 2 year period and at the end of the 2 year period.

The predictors were best at identifying those not victimized and those re-victimized during the 2 year period.

There were few false positives for victimization—only 7%-13% of those not victimized were classified as being victimized.

However, there were substantial percentages of false negatives for victimization with the majority of the desisted and newly victimized misclassified as not victimized and 30%-39% of the re-victimized misclassified as not victimized.

So, using a relatively small set of predictors, many of the adolescents most at risk for victimization during the next 2 years (i.e., those at risk for victimization during both of the years) can be identified and assisted.

It seems particularly critical to focus on the link between the perpetration of aggressive behavior and victimization, and on behavior patterns that transcend the divide between online and offline environments.

More work needs to be done to discover factors that accurately identify adolescents at risk for relatively less chronic victimization (i.e., during 1 of the next 2 years).

Acknowledgement

This survey was supported by Cooperative Agreement number U49/CE000206 from the Centers for Disease Control and Prevention (CDC). The contents of this presentation are solely the responsibility of the authors and do not necessarily represent the official views of the CDC.

Learn More About CiPHR

To learn more about CiPHR and our projects, visit us online at innovativepublichealth.org

